

NECESSARY CHANGES IN BOTANICAL NOMENCLATURE.

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POPULUS BALSAMIFERA Linn. Sp. Pl. ii. 1034 (1753); Miller, Dict. ed. 8, no. 5 (1768). *P. angulatus* Ait. Hort, iii. 407 (1789).—*Populus balsamifera* Miller, l. c., is referred by the Index Kewensis to *P. deltoides* and to *P. heterophylla*. A careful comparison of Miller's description with that of Linnaeus shows, however, that the two are identical, Miller having copied the technical description of Linnaeus, l. c., *verbatim*. Both quote Hort. Cliff. 460. A reference to the latter publication shows that species No. 4 *Populus foliis cordatis crenatis* is the one referred to. This is founded solely on *Populus nigra, folio maximo, gemmis balsamum odoratissimum fundentibus* Catesby, Car. i. 34, t. 34 (1731), a Carolina species, also quoted by Miller, l. c. There is therefore no question as to the identity of the one with the other and that the binomial *P. balsamifera* belongs to the Carolina Poplar, as usually understood, since in last analysis the Linnaean species is founded upon that of Catesby.

P. TACAMAHACCA Miller, Dict. ed. 8, no. 6 (1768). *P. balsamifera* Marshall, Arbust. Amer. 107 (1785), & French ed. 173 (1788). *P. viminea* Marsh. l. c. *P. candicans* Ait. Hort. iii. 406 (1789). *P. ontariensis* Desf. Hort. Par. *P. balsamifera* var. *candicans* A. Gray, Man. ed. 2, 419 (1858).—This is the common Balm of Gilead. Miller's name, which is the oldest, should be adopted for it instead of the later one of Aiton. A form with very scanty pubescence is

Var. **Michauxii** (Henry), n. comb. (*P. balsamifera* var. *Michauxii* Henry.)

Another form, generally without cordate leaves and pubescence, is the Northern Balsam Poplar that has so generally been known as *P. balsamifera*. In accordance with priority this should bear the name

Var. **lanceolata** (Marsh.), n. comb. *P. balsamifera* Linn. Syst. Nat. ed. 13, ii. 656 (1770) and possibly of some earlier editions, and also of most subsequent authors but not of Linn. Sp. Pl. ii. 1034 (1753). *P. balsamifera* var. *lanceolata* Marsh. Arbust. Amer. 108 (1785), & French ed. 173 (1788).

VERONICA PERSICA Poir. Dict. viii. 542 (1808). *V. Buxbaumii*

Ten. Fl. Nap. i. 7, t. 1 (1811).— *Veronica Tournefortii* C. C. Gmelin, Fl. Bad. i. 39 (1805), is the name employed in our local manuals to designate the plant that has, at times, been passing under the names of *V. Buxbaumii* or *V. byzantina*. A reference to Gmelin's Flora Baden shows: (1) that the specific name is based upon Tournefort's *Veronica orientalis, foliis Hederae terrestris, flore magno*; (2) that the synonymy quoted is the Tournefortian species just mentioned, *V. filiformis* Sm. Trans. Linn. Soc. i. 195 (1791), and Buxbaum, Plantae minus cognitae Cent. i. t. 40, f. 1 (1727), all these being identical; (3) that the greater part of the description applies to *V. filiformis* Sm. The description of the leaf is that of *V. Buxbaumii*. While it is more than probable that Gmelin intended to include under his name both the species then known as *V. filiformis* Sm. and that which was later called *V. Buxbaumii* Ten., a careful analysis of all the factors to be considered can not leave any doubt but that he intended to make the Tournefortian species the type of his own and this conclusion is particularly evidenced by the specific name itself which certainly cannot have been derived from any other element. Since a binomial stands or falls with the element upon which it is founded, *V. Tournefortii* becomes a synonym of the older *V. filiformis* Sm. and its retention for *V. Buxbaumii* is erroneous. *V. persica* Poir. seems to be the oldest name applicable and should be taken up instead of *V. Tournefortii* for the species long known as *V. Buxbaumii*.

VIBURNUM OPULUS Linn. var. AMERICANUM (Mill.) Ait. In RHODORA, XX. 14-15 (1918) Mr. S. F. Blake gives his reasons for dropping the "(Mill.)" from the authority for this variety and retaining "Ait." only. The reasons are that Miller's herbarium specimen of his *Viburnum americanum* is nothing more nor less than *Hydrangea arborescens* Linn. [Therefore by inference Miller's species is a mere synonym of *Hydrangea arborescens* Linn.] and that as Aiton made no reference to Miller's publication, Miller should not be a part of the author-citation. The above argument of Mr. Blake is of the nature of a boomerang for it is an excellent one against the practice he follows of adopting old herbarium specimens as types of species. Miller calls his species the Guelder Rose and says it has red berries, factors that will not permit of the species being referred as a synonym to *Hydrangea arborescens*. While Aiton did not mention Miller's publication there can be no doubt that he knew of it and that it was this knowledge that led him, when describing the plant as a variety, to use

the same name that Miller did. The authority therefore should remain as heretofore "(Miller) Ait."

It would be interesting to know if Miller's *Hydrangea arborescens* is represented in his herbarium and if so by a specimen of what species. Is it perhaps *Viburnum americanum*, thus proving another instance of the interchange of labels or of specimens? Philip Miller was too discriminating a botanist ever to have described in the same volume identical plants under two such widely diverse genera as *Hydrangea* and *Viburnum*.

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BIDENS CONNATA Muhl., var. **gracilipes**, n. var., foliis primariis lobatis, lobis 2-4 basilaribus divergentibus decurrentibus, lobo terminali foliisque superioribus lanceolato-attenuatis anguste serratis dentibus subfalcatis, petiolis gracilibus vix marginatis; achaeniis exterioribus 3-4 mm. longis, interioribus 4.5-5 mm. longis aristis marginalibus 2-2.5 mm. longis.

Primary leaves lobed, the 2-4 lobes basal, divergent, decurrent; the terminal lobe and the upper leaves lance-attenuate, slenderly serrate with subfalcate teeth; petioles slender, scarcely margined: outer achenes 3-4 mm. long; the inner 4.5-5 mm. long, with marginal awns 2-2.5 mm. long.—MASSACHUSETTS: peaty margins of small ponds west of White Pond, Chatham, September 9, 1913, *Fernald & Long*, no. 10,683; quagmire in woods south of Sparrow Young's Pond, Chatham, August 20, 1918, *Fernald & Long*, no. 17,606; borders of peaty quagmires east of Buck Pond, Harwich, August 30, 1918, *Fernald & Long*, no. 17,607; sandy beach of Seymour Pond, Harwich, September 19, 1918, *Fernald & Weatherby*, no. 17,608 (TYPE in Gray Herb.); wet shore, Mashpee Pond, Mashpee, September 16, 1916, *Bean, Bird & Knowlton*.

In its slender-petioled leaves near *B. connata*, var. *petiolata* (Nutt.) Farwell, but differing in the conspicuously lobed primary leaves and the very short achenes, the achenes of well developed var. *petiolata* being larger, the outer up to 6.5 mm. long, the inner up to 8 mm. long and with marginal awns up to 4.7 mm. long. In its conspicuously lobed leaves and short achenes var. *gracilipes*, which is abundant on Cape Cod, is close to typical *B. connata*; but the latter plant has the